AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

Listing of Claims:

Claims 1 and 2 (Cancelled).

3. (Currently amended) A measuring system for determining a property of an oil from a dielectric property of the oil, comprising:

a first sensor for measuring an electric capacitance and a second sensor for measuring a temperature, wherein the first sensor is designed as a dielectric sensor which is immersed in the oil and has a stray-field capacitor which functions as the measuring capacitor, and the second sensor is designed as a temperature sensor which is immersed in the oil,

wherein the first and second sensors are each connected to an analyzer device which assigns a value of the property to be determined to a measured temperature value and a measured electric capacitance value, wherein the property to be determined includes an ageing state of the oil, and

wherein the value of the electric capacitance measured by the dielectric sensor is compared in a comparator device of the analyzer device with a stored reference value assigned to the measured temperature value, and a signal is output as a function of whether the reference value is reached or exceeded.

4. (Currently amended) A measuring system for determining a property of an oil from a dielectric property of the oil, comprising:

a first sensor for measuring an electric capacitance and a second sensor for measuring a temperature, wherein the first sensor is designed as a dielectric sensor which is immersed in the oil and has a stray-field capacitor which functions as the measuring capacitor, and the second sensor is designed as a temperature sensor which is immersed in the oil; and

a compensation device for correcting the measured value of the electric capacitance, taking into account a capacitance reference value measured on an auxiliary capacitor situated in proximity to the measuring capacitor, wherein the corrected measured value of the electric capacitance and the temperature measured by the second sensor are used to determine an ageing state of the oil.

5. (Cancelled)

6. (Currently amended) ~~A sensor~~ The measuring system ~~for measuring a dielectric property of an oil~~ according to claim 4, ~~comprising:~~

~~a dielectric sensor which is immersed in the oil and has a measuring capacitor designed as a stray-field capacitor,~~ wherein the dielectric sensor ~~has an~~ includes the auxiliary capacitor and on introduction of the dielectric sensor into the oil, the auxiliary capacitor is not immersed in the oil until the measuring capacitor is fully immersed in the oil, wherein feeder lines of the measuring capacitor and the auxiliary capacitor are identical in design and are arranged in mutual symmetry.

7. (Currently amended) ~~A sensor~~ The measuring system ~~for measuring a dielectric property of an oil~~ according to claim 4, ~~comprising:~~

~~a dielectric sensor which is immersed in the oil and has a measuring capacitor designed as a stray field capacitor,~~ wherein the dielectric sensor ~~has an~~ includes the auxiliary capacitor and on introduction of the dielectric sensor into the oil, the auxiliary capacitor is not immersed in the oil until the measuring capacitor is fully immersed in the oil, wherein the auxiliary capacitor is composed of at least one spur line which ends upstream from the measuring capacitor and is designed and arranged like the feeder lines of the measuring capacitor.

8. (Currently amended) The ~~sensor~~ measuring system as recited in Claim [[6]] 4, wherein the measuring capacitor is formed by a plurality of flat printed conductors in the form of interdigital capacitor.

9. (Currently amended) The ~~sensor~~ measuring system as recited in Claim 8, wherein the printed conductors are printed on an insulating substrate by thin-film or thick-film methods.

10. (Currently amended) The ~~sensor~~ measuring system as recited in Claim 6 , further comprising:

a temperature sensor in the form of a Negative Temperature Coefficient (NTC) resistor, a Positive Temperature Coefficient (PTC) resistor or a temperature element.

11. (Currently amended) The ~~sensor~~ measuring system as recited in Claim 10, wherein the temperature sensor is connected to the dielectric sensor to form a structural unit.

12. (Currently amended) The ~~sensor~~ measuring system as recited in Claim 9, wherein feeder lines leading to a temperature sensor are applied to the insulating substrate in the form of printed conductors.

13. (Currently amended) The ~~sensor~~ measuring system as recited in Claim 11, wherein feeder lines leading to the temperature sensor are applied to the insulating substrate in the form of printed conductors.

14. (Currently amended) A measuring system for determining a property of an oil from a dielectric property of the oil, comprising:

a first sensor for measuring an electric capacitance and a second sensor for measuring a temperature, wherein the first sensor is designed as a dielectric sensor which is immersed in the oil and has a stray-field capacitor which functions as [[the]] a measuring capacitor, and the second sensor is designed as a temperature sensor which is immersed in the oil, and wherein the first and second sensors are each connected to an analyzer device which assigns a value of the property to be determined to a measured temperature value and a measured electric capacitance value, wherein the property to be determined includes an ageing state of the oil, and wherein the value of the electric capacitance measured by the dielectric sensor is compared in a comparator device of the analyzer device with a stored reference value assigned to the measured temperature value, and a signal is output as a function of whether the reference value is reached or exceeded.

15. (Currently amended) ~~A sensor~~ The measuring system ~~for measuring a dielectric property of an oil~~ according to claim 14, ~~comprising:~~

~~a dielectric sensor which is immersed in the oil and has a measuring capacitor designed as a stray-field capacitor,~~ wherein the dielectric sensor has an auxiliary capacitor and on introduction of the dielectric sensor into the oil, the auxiliary capacitor is not immersed in the oil until the measuring capacitor is fully immersed in the oil, and wherein feeder lines of the measuring capacitor and the auxiliary capacitor are identical in design and are arranged in mutual symmetry, wherein the auxiliary capacitor is composed of at least one spur line which ends upstream from the measuring capacitor and is designed and arranged like the feeder lines of the measuring capacitor, wherein the measuring capacitor is formed by a plurality of flat printed conductors in particular in the form of interdigital capacitor, and wherein the printed conductors are printed on an insulating substrate by thin-film or thick-film methods.

16. (Cancelled)

17. (Previously presented) The device of claim 19, wherein said first sensor includes a dielectric sensor and said first property is a capacitance of the oil, and said second sensor includes a temperature sensor and said second property is a temperature of the oil.

18. (Currently amended) A measuring device, comprising:

a first sensor that measures a first property of an oil and outputs a first measured value;

a second sensor that measures a second property of said oil and outputs a second measured value; and

an analyzer device connected to said first and second sensors, wherein said analyzer device compares said first and second measured values with stored reference values and outputs at least one signal based on differentials between said measured values and said stored reference values, wherein the at least one signal determines an ageing state of the oil, and wherein said first sensor is a capacitor having conductive feeder lines disposed on an insulating substrate.

19. (Currently amended) A measuring device, comprising:

a first sensor that measures a first property of an oil and outputs a first measured value;

a second sensor that measures a second property of said oil and outputs a second measured value;

an analyzer device connected to said first and second sensors, wherein said analyzer device compares said first and second measured values with stored reference values and outputs at least one signal based on differentials between said measured values and said stored reference values, wherein the at least one signal determines an ageing state of the oil; and

a compensation device that takes calibrating measurements of said first and second properties.

20. (Previously presented) The device of claim 19, wherein said compensation device is an auxiliary capacitor disposed in proximity to said first sensor.

21. (Previously presented) The device of claim 20, wherein said auxiliary capacitor includes at least one spur line ending upstream from feeder lines of a measuring capacitor of said first sensor and that is symmetrical with the feeder lines of said measuring capacitor.

22. (Previously presented) The device of claim 20, where said first sensor is structurally attached to said second sensor.

Claims 23-26 (Cancelled).

27. (New) A measurement assembly to determine a characteristic of a fluid from a dielectric property of the fluid, comprising:

a first sensor to measure an electrical capacitance;

a second sensor for temperature measurement, wherein the first sensor is formed as a dielectric sensor that can be immersed in the fluid and has a scatter field capacitor serving as a measurement capacitor, and wherein the second sensor is formed as a temperature sensor that can be immersed in the fluid;

an auxiliary capacitor, wherein the capacitance of the auxiliary capacitor changes on the basis of external influences in the same sense as the capacitance of supply lines of the measurement capacitor; and

a compensation device to correct the measured value of the electrical capacitance of the measurement capacitor taking into account a reference value of a capacitance measured in the auxiliary capacitor arranged in the vicinity of the measurement capacitor, wherein, on introduction of the dielectric sensor into the fluid, the auxiliary capacitor is immersed in the fluid at the earliest when the measurement capacitor is fully immersed in the fluid.

28. (New) The measurement assembly according to claim 27, wherein the characteristic is an ageing state of the fluid.

29. (New) The measurement assembly according to claim 28, wherein the fluid is an oil.

30. (New) The measurement assembly according to claim 29, wherein the oil is a deep-frying fat.

31. (New) The measurement assembly according to claim 27, wherein the first and second sensors are connected with an analysis device which allocates a value of the characteristic to be determined to a measured temperature value and to a measured electrical capacitance value.

32. (New) The measurement assembly according to claim 31, wherein the analysis device includes a comparison device, wherein the value of the electrical capacitance measured by the dielectric sensor is compared with a stored reference value allocated to the measured temperature value and a signal is output as a function of reaching or exceeding the reference value.

33. (New) The measurement assembly according to claim 27, wherein the supply lines of the measurement capacitor and supply lines of the auxiliary capacitor are formed symmetrically and identical to each other in construction.

34. (New) The measurement assembly according to claim 27, wherein the auxiliary capacitor includes two stub cables ending in front of the measurement capacitor which are formed and arranged in a same way as the supply lines of the measurement capacitor.

35. (New) The measurement assembly according to claim 27, wherein the measurement capacitor is formed by a plurality of flat conductor tracks.

36. (New) The measurement assembly according to claim 35, wherein the plurality of flat conductor tracks are formed as an inter-digital capacitor.

37. (New) The measurement assembly according to claim 35, wherein the plurality of flat conductor tracks are printed in thin or thick layer technology onto an insulated carrier.

38. (New) The measurement assembly according to claim 37, wherein supply lines of the temperature sensor are applied to the insulating carrier in the form of conductor tracks.

39. (New) The measurement assembly according to claim 27, wherein the temperature sensor is at least one of: a Negative Temperature Coefficient (NTC) resistor, a Positive Temperature Coefficient (PTC) resistor and a temperature element.

40. (New) The measurement assembly according to claim 27, wherein the temperature sensor is connected with the dielectric sensor to form a structural unit.